

ABSTRACT OF THE DISCLOSURE

A linear motor comprises a stator including a stator yoke and a plurality of permanent magnets arranged side by side on the stator yoke along a motor running direction in alternately reversed directions to produce alternating polarities, and a moving part including a plurality of magnetic teeth arranged along the motor running direction and coils wound around the individual magnetic teeth. Cutouts formed in end surfaces of yoke portions of the individual magnetic teeth opposite to their side facing the stator line up to form a groove-shaped channel running through the yoke portions of the successive magnetic teeth, and the multiple magnetic teeth are joined together into a single structure by fitting a connecting bar in the groove-shaped channel.